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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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FISH & RICHARDSON, P.C. PO BOX 1022 MINNEAPOLIS, MN 55440-1022			YANG, RYAN R	
			ART UNIT	PAPER NUMBER
			2672	

DATE MAILED: 03/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/697,253

Applicant(s)

EBERT, PETER S.

Examiner

Ryan R. Yang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10, 12, 15-40 and 42-57 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12, 15-40 and 42-57 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This action is responsive to communications: Amendment, filed on 12/21/2005.  
This action is final.

2. Claims 1-10, 12, 15-40 and 42-57 are pending in this application. Claims 1, 21, 28 and 52 are independent claims. In the Amendment, filed on 12/21/2005, claims 1, 12, 21 and 28 were amended and claims 52-57 were added.

3. The present title of the invention is "Smart radar chart" as filed originally.

#### ***Claim Rejections - 35 USC § 103***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1-10, 12, 15-33, and 42-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brooks et al (US 2004/0113912) in view of Fushimi et al (US 2004/0070624), and further in view of Ito (US 6,923,653).

Regarding claim 1, Brooks et al, hereinafter Brooks, discloses that the claimed feature of a method comprising: obtaining data corresponding to one or more data dimensions from a data source [i.e. "data collection"; 6] (See Fig 1); generating a smart radar chart graphical user interface, the smart radar chart graphical user interface comprising a visual representation [i.e. 'graphical representations in Fig 5-9] of the obtained data [i.e. "Qa-Ql"] corresponding to the one or more data dimensions [i.e. "Xa-Xl"], wherein each data dimension [i.e. "Xa-Xl"] is displayed radiating from a central point (See Fig 9), and data [i.e. "Qa-Ql"] corresponding to a data dimension is displayed

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at a position indicating a value of the data in relation to a reference value [i.e. "UL","LL"] to enable identification of an exception; and rendering the smart radar chart graphical user interface (See Fig 9, [63]).

Brooks does not specifically disclose the implementation of graphical user interface. However, such limitation is shown in the teaching of Fushimi et al, hereinafter Fushimi, [i.e. "user interface section" within radar chart display control unit; See Fig 2-3]. It would have been obvious to one skilled in the art to incorporate the teaching of Fushimi into the teaching of Brooks, in order to provide user friendly manner of manipulating the graphical representations effectively, as such improvement is also advantageously desirable in the teaching of Brooks for "the process operator can interact with the display unit to adjust...to see the effect this..." (See [31]).

Brooks and Fushimi do not specifically disclose "the reference value comprises an average value of measured data corresponding to a data dimension and the exception represents a positive or a negative deviation from the reference value", however, this is known in the art as taught by Ito. Ito discloses a radar chart in which the reference values are average values and the data (G Type) is shown deviated from the average (see Figure 26).

Thus, it would have been obvious to one of ordinary skill in the art to incorporate the teaching of Ito into Brooks and Fushimi because Brooks and Fushimi discloses a method of generating a radar chart and Ito further disclose the radar can have drawing representing reference values and data showing positive and negative deviation in order to help analyze the data.

6. Regarding claim 2, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 1, and Brooks further discloses that generating a first smart radar chart graphical user interface having a first level of detail of the obtained data. (See the graphical representations between Fig 6 and Fig 7, where different level are shown; Also See [158] in Fushimi et al)

7. Regarding claim 3, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 2, and Brooks further discloses that a second level of detail of the obtained data for one or more dimensions displayed in the first smart radar chart graphical user interface. (See the graphical representations between Fig 6 and Fig 7, where different level are shown; Also See [158] in Fushimi et al)

8. Regarding claim 4, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 3, and Brooks further discloses that a second smart radar chart in response to user manipulation of an input device. (See [31-33]; Also See [158] in Fushimi et al)

9. Regarding claim 5, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 1, and Brooks further discloses that obtaining data from a remote data source. (See [24] in Fig 2, [46],[49])

10. Regarding claim 6, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 5, and Brooks further discloses that obtaining data using a communications link. (See [24] in Fig 2, [46],[49])

11. Regarding claim 7, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 1, and Brooks further discloses that obtaining data periodically [i.e. discrete operation"]. (See [15])

12. Regarding claim 8, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 1, and Brooks further discloses that obtaining data continuously [i.e. "continuous operation"]. (See [15])

13. Regarding claim 9, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 1, and Fushimi further discloses that obtaining data in response to an occurrence of an event. [i.e. "input interface"; 15 in Fig 2, See [51-55]]

14. Regarding claim 10, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 1, and Fushimi further discloses that the event comprises a user input. [i.e. "input interface"; 15 in Fig 2, See [51-55]]

15. Regarding claim 12, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 1, and Brooks further discloses that the reference value comprises a dynamically computed value. (See Fig 5-7, [25-34])

16. Regarding claim 15, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 1, and Brooks further discloses that the reference value comprises a predetermined value. (See Fig 9, [63])

17. Regarding claim 16, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 16, and Fushimi further discloses normalizing ["normalizing"] the data. (See [116-117])

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18. Regarding claim 17, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 16, and Brooks further discloses displaying the data [i.e. "Qa-QI"] in relation to a representation of the reference value [i.e. "LL","UL"]. (See Fig 9, [63])

19. Regarding claim 18, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 16, and Brooks further discloses the reference value is dynamically computed based on the obtained data. (See Fig 5-7, [25-34])

20. Regarding claim 19, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 1, and Brooks further discloses indicating a difference between the data and the reference value. (See Fig 9, Abstract)

21. Regarding claim 20, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 1, and Brooks further discloses generating an audible alert ["alarm" i.e. 'sounding alarm'] indicating presence of an exception. (See Abstract, Fig 1,2,5)

22. Regarding claims 21-25 and 27, claims 21-25 and 27 are similar in scope to the claims 1-3, 5, 17 and 19, respectively, and thus the rejection to claims 1-3, 5, 17 and 19 hereinabove are also applicable to claims 21-25 and 27, respectively.

23. Regarding claim 26, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 25, and Brooks further discloses generating a representation of the data at distance proportional to a magnitude of a deviation of the data from the reference value. (See Fig 9, [63]; Also See [42],[59],[89],[127] in Fushimi)

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24. Regarding claim 28, refer to the discussion for the claim 1 hereinabove, Brooks also discloses that the claimed feature of a graphical user interface that enables perception of information regarding one or more data dimensions, the interface comprising:

a data presentation area [i.e. "display unit"; 12];

a visual representation [Fig 5-9] within the data presentation area [12] based upon data corresponding to one or more data dimensions [Xa-XI], wherein each data dimension is displayed radiating from a central point in a common plane (See Fig 9), and data corresponding to a data dimension is displayed at a position indicating a value of the data [Qa-QI] in relation to a reference value [UL,LL] to enable identification of an exception. (See Fig 1, Fig 9, [63])

25. Regarding claims 29-30, claims 29-30 are similar in scope to the claims 2-3, respectively, and thus the rejection to claims 2-3 hereinabove are also applicable to claims 29-30, respectively.

26. Regarding claims 31-33, refer the discussion for the claim 1 hereinabove, and Fushimi further discloses that the second representation is activated in response to user overt selection of a designated portion of the first representation using a user input device, where a position of an input device relative to a user interface. (See [158])

27. Regarding claims 42-43, 45-46 and 48, claims 42-43, 45-46 and 48 are similar in scope to the claims 15, 17, 26 and 19-20, supra, respectively, and thus the rejection to claims 15, 17, 26 and 19-20 are also applicable to claims 42-43, 45-46 and 48, respectively.



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28. Regarding claim 44, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 43, and Brooks further discloses that the representation of the reference value comprises a reference circle. (See Fig 9)

29. Regarding claim 47, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 128 and Brooks further discloses that a summary indicator is rendered based on the value of the data. (See Fig 5-9)

30. Regarding claim 49, Brooks, Fushimi and Ito demonstrated all the elements as disclosed in the rejected claim 1, and Brooks further discloses that displaying positive exceptions in a different color from negative exceptions. (See [21],[30],[35])

31. Regarding claims 50-51, claims 50-51 are similar in scope to the claim 49, and thus the rejection to claim 49 hereinabove is also applicable to claims 50-51.

32. Claims 34-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brooks et al (US 2004/0113912), Fushimi et al (US 2004/0070624), Ito, and further in view of Slotznick (6,011,537).

Regarding claim 34, Brooks fails to disclose that the second representation is rendered in a pop-up window. However, utilizing of pop-up window to display new contents is shown in the teaching of Slotznick. (See col 3 line 24-36) It would have been obvious to one skilled in the art to incorporate the teaching of Slotznick into the teaching of Brooks et al, in order to improve user's responsiveness for observing the graphical representation (as pop-up window is more noticeable by user), as such improvement is also advantageously desirable in the teaching of Brooks et al for rendering multiple graphical representations with user friendly manner.

33. Regarding claim 35, refer to the discussion for the claim 34 hereinabove, Slotznick further discloses that the second representation is rendered as an overlay to the first representation. (See Fig 17, col 38 line 11-24)

34. Regarding claims 36-38, refer to the discussion for the claim 34 hereinabove, Slotznick further discloses that automatically closing the second representation based upon an expiration of a predetermined length of time. (See col 38 line 25-64)

35. Regarding claim 39-40, refer to the discussion for the claim 34 hereinabove, Slotznick further discloses that the intent to close the second representation is inferred based upon a position/input of a user input device. (See Fig 17, col 38 line 25-64)

35. Claims 52-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brooks et al (US 2004/0113912), Fushimi et al (US 2004/0070624), Ito and further in view of Subasic et al (US 6,721,734), hereinafter Subasic.

As per claim 52, Brooks, Fushimi and Ito discloses all the elements as in claim 1 except "the reference value for the displayed data dimension is normalized across reference values for other displayed data dimensions", however, this is known in the art as taught by Subasic. Subasic discloses a method of display data using radar chart in which reference values are normalized (Figure 5 where the maximum is normalized to 1 and it is considered a reference value).

Thus, it would have been obvious to one of ordinary skill in the art to incorporate the teaching of Subasic into Brooks, Fushimi and Ito because Brooks, Fushimi and Ito disclose a method of displaying data in radar chart and Subasic discloses the reference values could be normalized in order help compare the data in perspective.

36. As per claim 53, Brooks, Fushimi, Ito and Subasic demonstrated all the elements as disclosed in the rejected claim 52. Since the claim limitations are similar to claims 2-3 combined, it is further rejected as claims 2-3 combined.

37. As per claim 54, Brooks, Fushimi, Ito and Subasic demonstrated all the elements as disclosed in the rejected claim 52. Since the claim limitations are similar to claims 5-6 combined, it is further rejected as claims 5-6 combined.

38. As per claim 55, Brooks, Fushimi, Ito and Subasic demonstrated all the elements as disclosed in the rejected claim 52. Since the claim limitations are similar to claims 7-8 combined, it is further rejected as claims 7-8 combined.

39. As per claim 56, Brooks, Fushimi, Ito and Subasic demonstrated all the elements as disclosed in the rejected claim 52. Since the claim limitations are similar to claim 19, it is further rejected as claim 19.

40. As per claim 57, Brooks, Fushimi, Ito and Subasic demonstrated all the elements as disclosed in the rejected claim 52. Since the claim limitations are similar to claims 12 and 15 combined, it is further rejected as claims 12 and 14 combined.

#### ***Response to Arguments/Amendments***

41. Applicant's arguments with respect to claims 1-10, 12, 15-40, and 42-51 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

42. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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43. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

#### ***Inquiries***

44. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan R Yang whose telephone number is (571) 272-7666. The examiner can normally be reached on M-F 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on (571) 272-7664. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ryan Yang  
Primary Examiner  
March 2, 2006